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ATTORNEY DOCKET NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE R PH-7076-A 09/505,788 02/17/00 OLSON **EXAMINER** HM22/1010 COLEMAN, B SCOTT K LARSEN ART UNIT PAPER NUMBER DUPONT PHARMACEUTICALS COMPANY C/O E I DU PONT DE NEMOURS AND CO 1007 MARKET STREET WILMINGTON DE 19898 1624 DATE MAILED: 10/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

# Application No.

Office Action Summary

Applicant(s)

09/505,788

Examiner

Art Unit

**OLSON** 

	Brenda Coleman	1624		
The MAILING DATE of this communication appe	ears on the cover sheet with the corre	espondence addi	ress	
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS STATE MAILING DATE OF THIS COMMUNICATION.	SET TO EXPIRE3 MONT	H(S) FROM		
- Extensions of time may be available under the provisions of 3 after SIX (6) MONTHS from the mailing date of this comm - If the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than thirty (30) of the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for reply specified above is less than the period for r	unication.			
<ul> <li>be considered timely.</li> <li>If NO period for reply is specified above, the maximum statute</li> <li>communication.</li> </ul>	ory period will apply and will expire SIX	(6) MONTHS from	n the mailing date of this	
<ul> <li>Failure to reply within the set or extended period for reply wil</li> <li>Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>	I, by statute, cause the application to be r the mailing date of this communication	come ABANDON , even if timely fil	ED (35 U.S.C. § 133). ed, may reduce any	
Status			·	
1) Responsive to communication(s) filed on Jul 25	, 2001		•	
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.			
3) Since this application is in condition for allowan closed in accordance with the practice under Ex			ne merits is	
Disposition of Claims				
4) 💢 Claim(s) <u>1-24</u>	is/ar	e pending in th	e application.	
4a) Of the above, claim(s) 7, 9, 17, 19, and 21	is/a	re withdrawn f	rom consideration.	
5)		_ is/are allowed. _ is/are rejected.		
6) 💢 Claim(s) 1-6, 8, 10-16, 18, 20, and 22-24				
7)				
8) 🗌 Claims	are subject to restr	iction and/or el	ection requirement.	
Application Papers				
9) The specification is objected to by the Examiner	r.			
10) The drawing(s) filed on is,	/are objected to by the Examiner.			
11) The proposed drawing correction filed on	is: a)□ approved	b)□ disappro	ved.	
12) The oath or declaration is objected to by the Ex	aminer.			
Priority under 35 U.S.C. § 119				
13) Acknowledgement is made of a claim for foreig	n priority under 35 U.S.C. § 119(a	ı)-(d).		
a) $\square$ All b) $\square$ Some* c) $\square$ None of:				
1. $\square$ Certified copies of the priority documents	have been received.			
2. $\square$ Certified copies of the priority documents	have been received in Application	No	•	
3. Copies of the certified copies of the priorit application from the International B *See the attached detailed Office action for a list o	Sureau (PCT Rule 17.2(a)).	n this National	Stage	
14)  Acknowledgement is made of a claim for dome		)(e)		
	and province and a cross of a re-	.1-/-		
Attachment(s)  15) Notice of References Cited (PTO-892)	10)	N. / .		
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	18) Interview Summary (PTO-413) Pape 19) Notice of Informal Patent Applicatio.	·		
17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	20) Other:	,		

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#### **DETAILED ACTION**

Claims 1-24 are pending in the application.

This action is in response to applicants' amendment dated July 25, 2001. Claims 1, 2, 4-6, 8, 10, 12, 15-16, 18 and 20 were amended.

### Response to Arguments

Applicant's arguments filed July 25, 2001 have been fully considered with the following effect:

- 1. With regards to Applicant's traversal to the restriction requirement of the last office action, the applicant's amendments and arguments have been fully considered but are not found persuasive. The traversal is on the ground(s) that there are two criteria for a proper requirement between patentably distinct inventions: (1) the inventions must be independent or distinct as claimed; and (2) there must be a serious burden on the examiner if restriction is not required.
- (1) Note MPEP 2173.05(h) "where a Markush expression is applied only to a portion of a chemical compound, the propriety of the grouping is determined by a consideration of the compound as a whole, and does not depend on there being a community of properties in the members of the Markush expression.

Therefore, what should be considered for patentable distinctness is the compound as a whole. Would a whole compound where ring B forms an benzoxazepinone, benzothiazepinone, azepinone ring, etc. be patentably distinct from a whole compound where B forms a benzodiazepinone? If a reference for one would not be a reference for the other, then restriction

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is considered proper. Community of properties is not enough to keep benzoxazepinone, benzothiazepinone, azepinone in the same Markush claim with benzodiazepinone, where the Markush expression is applied only to a portion of a chemical compound. It is the compound as a whole benzoxazepinone vs benzothiazepinone vs azepinone vs benzodiazepinone, etc., that must be considered for patentable distinctness.

Thus, separate searches in the literature would be required. However, should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

(2) The degree of burden on the examiner is high. The class/subclass search on the **elected** invention was class 540/504, 505, 506, 509, 517 and 518 and class 514/221 which involved 645 US patents. This number does not include the search required in the area of journal articles and foreign patents.

The requirement is still deemed proper and is therefore made FINAL.

2. The applicant's amendments are sufficient to overcome the 35 U.S.C. § 112, first paragraph rejection of the last office action, which is hereby withdrawn.

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3. The applicant's amendments and arguments are sufficient to overcome the 35 U.S.C. § 112, second paragraph rejections labeled a)-e) and g)-z) of the last office action, which are hereby withdrawn. However, with regards to the 35 U.S.C. § 112, second paragraph rejection labeled f) and aa) of the last office action, the applicant's amendments and remarks have been fully considered but they are not persuasive.

- f) The applicants' stated that "claims 6, 8, 10, 15, 16, 18 and 20 depend from claim 5" which was amended to be a dependent claim of claim 3. However, claims 15, 16, 18 and 20 are not dependent on claim 5, but claim 14 which only allows for 0-2 R<sup>13</sup> variables attached to the benzo fused radical.
- aa) The applicants' stated that they "provide in the specification utility, a general guideline for measuring and assessing utility, and examples sufficient to enable a person of ordinary skill in the art to determine whether compounds of the present invention effect gamma secretase activity and/or beta-amyloid production". It is not known which diseases and/or disorders other than Alzheimer's disease are associated with gamma secretase activity and/or beta-amyloid production.

Claims 15, 16, 18, 20, 23 and 24 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For reasons of record and stated above.

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rejection of the last office action, which is hereby withdrawn.

5. With regards to the provisional 35 U.S.C. § 101 rejection as claiming the same invention

as that of copending application 09/469,939 of the last office action, the applicants requested

"that this rejection be held in abeyance at this time".

Claims 5, 6, 8, 10-16, 18 and 20 are provisionally rejected under 35 U.S.C. 101 as

claiming the same invention as that of claims 5, 6, 8, 10-16, 18 and 20 of copending Application

No. 09/469,939. This is a provisional double patenting rejection since the conflicting claims have

not in fact been patented. For reasons of record.

6. With regards to the provisional obviousness-type double patenting rejection as being

unpatentable over copending application 09/469,939 of the last office action, the applicants

requested "that this rejection be held in abeyance at this time".

Claims 1-4 and 22-24 are provisionally rejected under the judicially created doctrine of

obviousness-type double patenting as being unpatentable over claims 1-36 of copending

Application No. 09/469,939. For reasons of record.

In view of the amendment dated July 25, 2001, the following new grounds of rejection

apply:

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#### Election/Restriction

7. Claims 7, 9, 17, 19 and 21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention, the requirement having been traversed in Paper No. 6.

8. Claims 1-5, 10, 12-15, 20 and 22-24 are rejected as being drawn to an improper Markush group. The recited compounds, while possessing a common utility, differ widely in structure and are not art-recognized equivalents and are thus, independently distinct for the reasons set forth in the response to the traversal of the restriction requirement above.

## Claim Rejections - 35 U.S.C. § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 9. Claims 5, 6, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following reasons apply:
  - a) Claim 5 recites the limitation "R<sup>11</sup> substituted to the seven membered ring" in the third structural formula in the second row. There is insufficient antecedent basis for this limitation in the claim.

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b) Claim 6 recites the limitation "R<sup>11</sup> substituted to the seven membered ring" in the

structural formula in the claim. There is insufficient antecedent basis for this

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limitation in the claim.

c) Claim 15 recites the limitation "R<sup>11</sup> substituted to the seven membered ring" in the

third structural formula in the second row. There is insufficient antecedent basis

for this limitation in the claim.

d) Claim 16 recites the limitation "R<sup>11</sup> substituted to the seven membered ring" in the

structural formula in the claim. There is insufficient antecedent basis for this

limitation in the claim.

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Brenda Coleman whose telephone number is (703) 305-1880. The examiner

can normally be reached on Mondays and Tuesdays from 9:00 AM to 3:00 PM and from 5:30 PM

to 7:30 PM and on Wednesday thru Friday from 9:00 AM to 6:00 PM.

The fax phone number for this Group is (703) 308-4734 for "unofficial" purposes and the

actual number for OFFICIAL business is 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group receptionist whose telephone number is (703) 308-1235.

Primary Examiner AU 1624

October 5, 2001